

Chrysotile, the most widely used variety of asbestos, occurs in Newfoundland, Quebec, Ontario, British Columbia and the Yukon Territory. The main centre of the industry is in Quebec, where 12 mines account for 90 p.c. of the country's production, but operating mines are also located in Newfoundland, Ontario and British Columbia. Newfoundland became a producing province in July 1963 when Advocate Mines Limited began production at Baie Verte on the Burlington Peninsula. This project, involving a capital expenditure of \$25,000,000, will be of great economic benefit to the northeastern portion of the province. The 5,000-ton-a-day mill is producing fibre particularly suited to asbestos-cement manufacture; it will be shipped mainly to the United States and Europe.

During the year, Canadian Johns-Manville announced plans to develop an asbestos occurrence in Reeves township, 40 miles southwest of Timmins, Ont. A development shaft is planned to open up two underground levels and provide bulk samples for pilot plant processing. This deposit, acquired by the company several years ago, is expected to provide a source of fibre to supplement the output of the Munro mine, east of Matheson in northern Ontario. In northern Quebec, Asbestos Corporation Limited continued its study of the Asbestos Hill project of the Murray Mining Corporation. This occurrence is 40 miles southeast of Deception Bay in Ungava and the fibre is reported to be of a type suited to the asbestos-cement industry.

Potash.—Potash has been newly added to the list of Canadian mineral products and although the industry is still in the early stages of development its product has unquestionably found a place in the markets of the world. The emphasis being placed on the need for fertilizers to improve agricultural productivity to feed a rapidly growing world population establishes the future of this industry.

The Canadian industry, concentrated in southern Saskatchewan, had its first full year of production in 1963 with the successful operation of the Esterhazy mine of International Minerals and Chemicals Corporation (Canada) Limited. The annual refinery capacity of this company was raised from 1,000,000 tons of product to 1,200,000 tons early in 1964 with the addition of processing machinery. A second shaft was started at Gerald, six miles southeast of the first shaft, and when this is completed in 1968 the mine capacity will be increased to about 4,000,000 tons of end products.

Several other significant developments are taking place in the field of potash recovery. In 1963, Kalium Chemicals Limited, after an extensive period of development and testwork, began the construction of a major facility for the recovery of potash by solution mining. This project, located near Belle Plaine 25 miles west of Regina, will tap the sylvite beds more than 5,000 feet below surface. The plant is expected to be 'on stream' in late 1964. The Potash Company of America Ltd. is completing a program of shaft rehabilitation and major equipment change at Patience Lake and plans to resume production in December 1964; the project will have an annual capacity of 600,000 tons of granular potash. Alwinal Potash of Canada Limited in mid-1963 announced plans for the investment of \$50,000,000 in a potash development in the Lanigan-Guernsey area of Saskatchewan. Shaft-sinking will start in 1964 and production is scheduled for 1968. Alwinal brings to Western Canada extensive European experience in shaft mining of potash. Three European companies are major shareholders.

Sulphur.—The dramatic development of the western Canadian gas fields as an important source of world sulphur continued into 1963. Output of elemental sulphur was some 20 p.c. higher than in 1962 and the aggressive drive by the western producers to seek wider markets met with outstanding success. More than 1,100,000 tons of Western Canada sulphur were shipped to domestic and foreign markets—an increase of almost 70 p.c. over the previous year.

The recent development of a world-wide marketing outlook has been of particular value to the Canadian industry. In addition to large exports to the United States, substantial tonnages have been shipped to the U.S.S.R., India, the Republic of South Africa, Australia and Taiwan, and during 1963 elemental sulphur began moving to Japan; it is